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(54) Title: MAKING SINTERED, IRON-BASED ALLOY PARTS BY USING BORON-CONTAINING MASTER ALLOYS

(57) Abstract: A method of making high-density (>7.0g/ml) sintered iron-based alloy parts by using boron-containing Master Alloys comprises the steps of mixing an atomised, boron-containing master alloy powder, or a plurality of master alloy powders at least one of which is boron-containing, with a conventional iron or iron alloy powder; optionally adding graphite and a lubricant in conventional amounts as used in powder metallurgy technology; and pressing and sintering the mix to an increased density, preferably in a reducing, inert or vacuum atmosphere at 1050 to 1300°C, to produce the part required. The invention also includes parts produced by the above defined method.

